

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 09/963,905

Filing Date:

September 26, 2001

Applicant:

T. Hagan et al.

Group Art:

3721

Examiner:

Christopher Harmon

Title:

HOUSING WITH FUNCTIONAL OVERMOLD

Attorney Docket: 0275D-000435

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

APPEAL BRIEF

Sir:

This is an appeal brief in support of an appeal from the March 12, 2004 final rejection of Claims 1, 2, 4 through 15, 29, 30 and 32.

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REAL PARTY IN INTEREST

Black & Decker Inc., being the assignee of the present application, is the real party in interest.

RELATED APPEALS & INTERFERENCES

To the best of Appellant's knowledge, no other appeals or interferences are pending which will directly affect or be directly affected by or have a bearing on the Board's decision in the present pending appeal.

STATUS OF THE CLAIMS

On March 31, 2004, Appellant appealed from the final rejection of Claims 1, 2, 4 through 15, 29, 30 and 32. Claims 3, 16 through 28, 31 and 33 have been canceled.

A copy of the claims at issue is provided in attached Appendix A.

A copy of the Office Action mailed March 12, 2004 placing the present application under final rejection is provided in attached Appendix B.

A copy of U.S. Patent No. 5,738,177 to Schell et al. is provided in attached Appendix C.

A copy of U.S. Patent No. 5,692,574 to Terada is provided in attached Appendix D.

STATUS OF AMENDMENTS

No amendment to the claims has been filed or is pending subsequent to the entry of the final rejection.

SUMMARY OF THE INVENTION

The invention relates to the use of overmolding to form a seal and/or vibration damper for sealing or damping the transmission of vibrations between the housing of a power tool and a second structure that is assembled to the housing.

With reference to Figure 2, an exemplary power tool 10 is illustrated to include a housing 12 that includes an end cap 30. With reference to Figures 3 through 5, the end cap 30 includes an end cap shell 100 and an overmold member 102. The end cap shell 100 is molded from a rigid plastic material, such as ABS, and the overmold member 102 is formed from a resilient material, such as a thermoplastic elastomer, that is molded onto the end cap shell 100 in a manner that simultaneously forms the overmold member 102 and couples it to the end cap shell 100.

The overmold member 102 includes a plurality of bumper members 170, a pair of isolators 172 and a linking member 174. Each of the bumper members 170 extends through the end cap shell 100 and terminates outwardly of the outer surface of the end cap shell 100 thus providing the end cap 30 with a degree of resiliency and shock absorption that may reduce the likelihood of damage to the housing 12 should the power tool 10 be dropped.

The isolators 172 are formed on the interior surface 154 of the end cap shell 100 and include an annular member 180 that extends forwardly of the interior surface 154. The isolators 172 are configured to engage the outer diameter 14a and the rear surface 14b of the housing 14c of the motor assembly 14 in a manner that maintains the rear surface 14b of the housing 14c in a predetermined location and which reduces or dampens the transmission of vibrations between the motor assembly 14 and the end cap shell 100.

The linking member 174 is fixedly coupled to each of the bumper members 170 and the isolators 172. The linking member 174 provides a flow path through which the resilient material flows during the formation of the bumper members 170 and the isolators 172. The linking member 174 also interconnects the bumper members 170 and the isolators 172, thereby rendering their removal from the end cap shell 100 more difficult.

Figures 10 and 11 illustrate another embodiment of the invention where the isolators 172 extend around the perimeter of a portion of the end cap cavity 104 and sealingly contact the rear surface 14b of the motor 14d. The isolators 172 seal the interface between the end cap shell 100 and the motor assembly 14, while the bumper members 170 seal the rear apertures 144 in the end cap shell 100. The space 188 defined by the isolators 172 may be filled with grease or another suitable lubricant, which lubricates a motor armature bearing 190.

ISSUES

Appellants present the following issue for review:

Whether or not Claims 1, 9, 30 and 32 are unpatentable under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,738,177 to Schell et al.

Whether or not Claims 1, 2, 4 through 15, 29, 30 and 32 are unpatentable under 35 U.S.C. §103(a) as being obvious in view of U.S. Patent No. 5,692,574 to Terada.

GROUPING OF THE CLAIMS

Claims 1, 2, 4 through 8, 29 and 30 stand or fall together and Claims 9 through 15 and 32 stand or fall together. The reasons why Appellant believes the two groups of claims to be separately patentable are explained below in the Arguments.

BACKGROUND OF THE INVENTION

Applicant notes that several of the rejections do not appear to be based on structures that can be characterized as being an "overmold" or an "overmold portion". Applicant notes that overmolding is known in the art as molding a plastic material, usually (but not always) a rubber-like elastomer, over a rigid substrate. Accordingly, one of ordinary skill in the art will understand from Applicant's disclosure that the terms "overmold" and "overmold portion" refer to a component that has been formed by molding and cohesively (and substantially permanently) attached to a rigid substrate.

Appellant notes that while overmolding has been used in conjunction with the housings for power tools, the overmold has typically been employed on the exterior of the housing, usually in the area of a pistol-gripped handle, to improve the ability of the handle to be gripped by the operator of the power tool. Consequently, in situations where it was desirable to dampen vibrations and/or form a seal between the housing and another structure the prior power tools would employ discrete isolators and seals, thereby increasing the part count (and the overall cost) of the power tool.

Appellant's solution to this problem is to extend the overmold to an interior portion of the housing to thereby co-form the isolator and/or seal with the remainder of the overmold, thereby decreasing the part count and the overall cost of the power tool.

ARGUMENTS

Rejections Based On U.S. Patent No. 5,738,177 to Schell et al.

Applicant notes that the Examiner has stated in the above-referenced final rejection (copy attached in Appendix B) that:

Schell et al. disclose a production assembly tool comprising a first structure 34 and a second structure 18, the first structure having a overmold portion 14 and structural portion 12. The overmold portion 14 is made from a resilient material/elastomer (neoprene rubber) and contacts the second structure 42 effectively dampening vibrations and stresses; see figures (1B and 19). Schell et al. disclose bumper member 76 for abutting the second structure 18 and limiting movement. Linking members 86 link the bumper and the overmold 14.

The Examiner's comments with respect to the Schell et al. reference (copy provided in Appendix C) appear to be directed only to the dampening of vibrations and stresses, which relates to Claims 9 and 32, and as such, do not

appear to be relevant to the subject matter of Claims 1 and 30, which concerns the use of an overmold to form a seal. Additionally, Appellant notes that the overmold (14) of the Schell et al. reference does not contact the transmission (42) (i.e., the component that the Examiner has identified as being the "second structure") at any point. Accordingly, the overmold (14) of the Schell et al. does not dampen vibrations between any portion of the housing (12) and the transmission (42) and does not form a seal between the housing (12) and the transmission (42).

It is well settled that "the burden of establishing a *prima facie* case of anticipation resides with the Patent and Trademark Office." *In re Skinner*, 2 USPQ 2d 1788, 1788-89 (B.P.A.I. 1986). If the examination at the initial stage does not produce a prima facie case of unpatentability, then without more the applicant is entitled to grant of the patent. *In re Oetiker*, 977 F.2d 1443, 24 USPQ 2d 1443 (Fed. Cir. 1992).

In W.L. Gore & Associates v. Garlock, Inc., the Federal Circuit stated that "anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration." 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). It is not enough, however, that the reference disclose all the claimed elements in isolation. Rather, as stated by the Federal Circuit, the prior art reference must disclose each element of the claimed invention "arranged as in the claim". Lindermann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984).

Anticipation, however, may reside even if the prior art reference relied on does not expressly disclose a <u>minor</u> aspect of the claimed invention. Under the principles of inherency, if a structure in the prior art <u>necessarily functions</u> in accordance with the limitations of a process or method claim of an application, the claim is anticipated. *In re King*, 801 F.2d 1324, 231 USPQ 136, 138 (Fed. Cir. 1986). The Federal Circuit has stated:

To serve as an anticipation when the reference is silent about the asserted inherent characteristic, such gap in the reference may be filled with recourse to extrinsic evidence. Such evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference and that it would be so recognized by persons of ordinary skill. *Continental Can Co. USA v. Monsanto Co.*, 948 F.2d 1264, 20 USPQ 2d 1746, 1749 (Fed. Cir. 1991).

In this regard, the CCPA has added that "[i]nherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (C.C.P.A. 1981) (quoting Hansgirg v. Kemmer, 102 F.2d 212, 214, 40 USPQ 665, 667 (C.C.P.A. 1939) (emphasis in original).

In view of the above, Applicant respectfully submits that the Examiner has not presented a prima facie case of anticipation. In this regard, the '177 patent to Schell et al. does not teach or suggest each and every limitation of Claims 1, 9, 30 and 32 and moreover, the Examiner cannot rely on inherency to fill in the gaps, as inherency "may not be established by probabilities or possibilities" as noted above. Accordingly, '177 patent to Schell et al. is not "a single prior art reference that discloses each element of the claim under consideration" and as such, the Examiner's rejection of Claims 1, 9, 30 and 32 under 35 U.S.C. §102(b) cannot stand.

Rejections Based On U.S. Patent No. 5,692,574 to Terada

Applicant notes that the Examiner has stated in the above-referenced final rejection (copy attached in Appendix B) that:

Terada discloses a portable power tool comprising a motor housing structure and a secondary structure 5; see figure 1B. The housing structure further comprises three molded portions 3a-3c. Overmold portion 30 is molded to fit on an exterior surface of projection 15 extending from housing portion 3c. Overmold portion 30 forms a seal with housing portion 3c and secondary structure 5. Overmold portion 30 is rubber suited to dampen vibrations between the housing structure 3 and secondary structure 5.

Terada does not directly disclose an overmold portion which is permanently and fixedly coupled to the structural portion, however the examiner takes OFFICIAL NOTICE that permanent coupling would have been obvious to one of ordinary skill in the art at the time the invention was made in order to insure a seal between the components.

A copy of the Terada reference is provided in Appendix D.

Appellant notes that the rubber ring (30) of the Terada reference is not formed by overmolding and moreover is not substantially permanently affixed to the housing (3). The '574 patent to Terada employs a discrete and independently formed rubber ring (30) that is not molded onto or permanently attached to anything. The rubber ring (30) is assembled onto, rather than cohesively attached to, a cylindrical projection (15) that is formed on a rearmost body section (3c) - see, Col. 5, lines 34 through 36 of the '574 patent to Terada: "[when] the rubber ring 30 is mounted around the projection...". (emphasis added). Moreover, the rubber ring (30) includes an inwardly opening groove (e.g., groove 33 in Figures 3A & 3B, groove 41 in Figure 4A) that extends about the outer periphery of the projection (15). If the rubber ring (30) were to be overmolded as alleged by the Office, the inwardly opening groove (33,41) could not be formed.

In view of the above, Appellant respectfully submits that the Office has not presented a *prima facie* case of obviousness. The establishment of a *prima facie* case of obviousness requires that three basic criteria be met: 1) some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings, 2) that there must be a reasonable expectation of success, and 3) that the prior art reference or references must teach or suggest all the claim limitations. *See*, *e.g.*, *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Moreover, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on an applicant's disclosure. *Id*.

Regarding the suggestion or motivation to modify the drill of the Terada reference, Appellant further notes that the Patent Law draws a distinction between trade-offs and motivation to combine: trade-offs often concern what is feasible, not what is necessarily desirable, whereas motivation to combine requires the latter. See, e.g., Winner International Royalty Corp. v. Wang, 2002 F.3d 1340, 53 USPQ2d 1580 (Fed. Cir.), cert. denied, 530 U.S. 1238 (2000).

In the instant case, the Examiner argues that "permanent coupling [of the rubber ring 30 of the Terada reference] would have been obvious to one of ordinary skill in the art at the time the invention was made in order to <u>insure a seal between the components</u>." The Terada reference, however, is not concerned with the sealing of the handle (5) to the housing (3) but rather with the attenuation of vibration. Accordingly, it appears that the motivation for the

modification is impermissibly found in Appellant's disclosure. Furthermore, Applicant notes that the rubber ring (30) of the Terada reference is subject to wear and is thus replaceable. Consequently, the modification that has been proposed by the Examiner (i.e., permanent attachment of the rubber ring (30) to the housing (3)) is a trade-off rather than the requisite motivation-to-combine, since it concerns what may be feasible rather than what is necessarily desirable.

With specific regard to Claims 1, 2, 4 through 8, 29 and 30, which include limitations wherein an overmold member is employed to form a seal between a housing and another structure, Appellant notes that the Terada reference does not describe the rubber ring (30) as sealing the handle (5) to the housing (3) and moreover, Appellant submits that sealing engagement of the handle (5) to the housing (3) would reduce or negate the vibration absorbing characteristics of the rubber ring (30). As such, Appellant submits there is no motivation to modify the Terada reference as proposed by the Examiner.

Additionally, Appellant further submits that the Examiner has not established a reasonable expectation of success or that the modified Terada reference will teach or suggest all the claim limitations. In this regard, it appears that the Examiner concludes that as the rubber ring (30) is made of a resilient material, it must seal against the handle (5). Appellant notes, however, that Terada is concerned with vibration absorption, which is accomplished through frictional engagement of the rubber ring (30) to the handle (5). Appellant notes, too, that frictional engagement does not necessarily equate to sealing engagement as the latter is highly dependent upon the load (force) that is applied

to a seal, the surface finishes of the components that are being sealed, etc. As noted above, "[i]nherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing *may* result from a given set of circumstances is not sufficient." *In re Oelrich*, 666 F.2d 578, 581, 212 USPQ 323, 326 (C.C.P.A. 1981) (quoting *Hansgirg v. Kemmer*, 102 F.2d 212, 214, 40 USPQ 665, 667 (C.C.P.A. 1939) (emphasis in original). Consequently, the Examiner cannot rely on inherency to support the rejection since he cannot show that the "missing descriptive matter is necessarily present in the thing described in the reference and that it would be so recognized by persons of ordinary skill" in the art.

In view of the above, Applicant submits that permanent coupling of the rubber ring (30) to the housing (3) of the Terada drill would not have been obvious to one of ordinary skill in the art for purposes of either vibration attenuation or sealing and as such, Applicant respectfully submits that the Examiner has not presented a prima facie case of obviousness. In this regard, there is no motivation or suggestion to modify the drill of the Terada reference in the manner proposed by the Examiner to arrive at the subject matter of Claims 1, 2, 4 through 15, 29, 30 and 32. Additionally, the proposed modification lacks a reasonable expectation of success and does not teach or suggest each and every limitation of Claims 1, 2, 4 through 8, 29 and 30. As such, the Examiner's rejection of Claims 1, 2, 4 through 15, 29, 30 and 32 under 35 U.S.C. §103(a) cannot stand.

CONCLUSION

Appellant respectfully submits that the Examiner has not presented a prima facie case of anticipation or obviousness. Accordingly, reversal of the final rejection of Claims 1, 2, 4 through 15, 29, 30 and 32 is respectfully requested.

Respectfully submitted,

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Date: April 26, 2004

- 1. (Previously Amended) A portable power tool comprising a housing structure and a secondary structure that are fixedly but removably coupled to one another, the housing structure at least partially housing at least one of a motor assembly, a transmission assembly and a clutch assembly, one of the housing structure and the secondary structure having a structural molded portion and an overmold portion that is formed from a resilient material and molded onto at least a portion of the molded portion such that the overmold portion is permanently and fixedly coupled to the structural molded portion, the overmold portion defining a seal portion that is configured to engage the other one of the housing structure and the secondary structure to form a seal between the molded portion and the other one of the housing structure and the secondary structure are coupled to one another.
- 2. (Previously Amended) The portable power tool of Claim 1, wherein the one of the housing structure and the secondary structure is an end cap.
 - 3. (Canceled)
- 4. (Previously Amended) The portable power tool of Claim 1, wherein the resilient material is a vibration dampening material that is configured to attenuate vibrations that are transmitted between the housing structure and the secondary structure.

- 5. (Previously Amended) The portable power tool of Claim 4, wherein the resilient material is a thermoplastic elastomer.
- 6. (Previously Amended) The portable power tool of Claim 1, wherein the overmold portion further includes a bumper member that is coupled to an exterior surface of the molded portion, the bumper member being configured to abut the other one of the housing structure and the secondary structure to limit movement of the other one of the housing structure and the secondary structure relative to the molded portion in a predetermined direction.
- 7. (Previously Amended) The portable power tool of Claim 6, wherein the bumper member is raised from the exterior surface of the molded portion but otherwise conforms to the shape of the molded portion in an area in which the bumper member and the other one of the housing structure and the secondary structure abut.
- 8. (Previously Amended) The portable power tool of Claim 6, wherein the overmold portion includes a linking member that couples the seal portion to the bumper member.

- 9. (Previously Amended) A portable power tool comprising a first structure and a second structure, the first structure at least partially housing at least one of a motor assembly, a transmission assembly and a clutch assembly, at least one of the first and second structures having a structural portion and an overmold portion that is formed from a resilient material and at least partially molded onto the structural portion so as to be permanently fixedly coupled thereto, the overmold portion defining an isolator portion that is configured to contact the other one of the first and second structures and dampen vibrations that are transmitted between the structural portion and the other one of the first and second structures.
- 10. (Previously Amended) The portable power tool of Claim 9, wherein the first structure is an end cap shell and the second structure is a motor that is associated with the motor assembly.
- 11. (Previously Amended) The portable power tool of Claim 9, wherein the overmold portion also retains the other one of the first and second structures in a predetermined location relative to the structural portion.
- 12. (Previously Amended) The portable power tool of Claim 9, wherein the resilient material is a thermoplastic elastomer.

- 13. (Previously Amended) The portable power tool of Claim 9, wherein the overmold portion further includes a bumper member that is coupled to an exterior surface of the structural portion, the bumper member being configured to abut the other one of the first and second structures to limit movement of the other one of the first and second structures relative to the structural portion in a predetermined direction.
- 14. (Previously Amended) The portable power tool of Claim 13, wherein the overmold portion includes a linking member that couples the isolator portion to the bumper member.
- 15. (Previously Amended) The portable power tool of Claim 13, wherein the bumper member is raised from the exterior surface of the structural portion but otherwise conforms to the shape of the structural portion in an area in which the bumper member and the other one of the first and second structures abut.

16 through 28. (Canceled)

29. (Previously Added) The portable power tool of Claim 1, wherein at least one threaded fastener is employed to secure the housing structure to one of the secondary structure and a tertiary structure to thereby fixedly couple the housing structure and the secondary structure to one another.

30. (Previously Amended) A portable power tool comprising:
a power train having a motor assembly and a transmission assembly;
a first structure in which at least a portion of the power train is disposed; and
a second structure that is fixedly but removably coupled to the first structure
to at least partially closing the first structure;

wherein the first structure includes a structural portion and an overmold portion, the overmold portion being formed from a resilient thermoplastic material that is molded onto the structural portion so as to be substantially permanently fixedly coupled thereto, the overmold portion defining a seal that sealingly engages at least one of the power train and the second structure.

31. (Canceled)

32. (Previously Amended) A portable power tool comprising:

a power train having a motor assembly and a transmission assembly;

a first structure in which at least a portion of the power train is disposed; and

a second structure that is fixedly but removably coupled to the first structure
to at least partially closing the first structure;

wherein the first structure includes a structural portion and an overmold portion, the structural portion having an exterior surface and an interior surface, the overmold portion being formed from a resilient thermoplastic material and being disposed on at least a portion of both the exterior and interior surfaces of the structural portion, the overmold portion being substantially permanently fixedly coupled to the structural portion, the overmold portion defining an isolator that extends from the interior surface of the structural portion and dampens vibrations transmitted between the power train and the structural portion.

33. (Canceled)

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Due 6-12-04	Application No.	Applicant(s)
	09/963,905	HAGAN ET AL.
Office Action Summary	Examiner	Art Unit
	Christopher R Harmon	3721
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet with th	e correspondence address
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory perion - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the main earned patent term adjustment. See 37 CFR 1.704(b).	1.136(a). In no event, however, may a reply be eply within the statutory minimum of thirty (30) and will apply and will expire SIX (6) MONTHS fute, cause the application to become ABANDO	e timely filed days will be considered timely. rom the mailing date of this communication. DNED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on 03	February 2004.	
	nis action is non-final.	
3) Since this application is in condition for allow	vance except for formal matters,	prosecution as to the merits is
closed in accordance with the practice under	r <i>Ex par</i> te <i>Quayl</i> e, 1935 C.D. 11,	453 O.G. 213.
Disposition of Claims		
4) Claim(s) <u>1,2,4-15,29,30 and 32</u> is/are pendin 4a) Of the above claim(s) is/are withdr		
5) Claim(s) is/are allowed.	rawn from consideration.	
6) Claim(s) <u>1,2,4-15,29,30 and 32</u> is/are rejecte	ad.	
7) Claim(s) is/are objected to.	su.	
8) Claim(s) are subject to restriction and	/or election requirement.	
Application Papers		
9)☐ The specification is objected to by the Examir	ner	
10) The drawing(s) filed on is/are: a) ac		ie Examiner
Applicant may not request that any objection to th		
Replacement drawing sheet(s) including the corre		• •
11) The oath or declaration is objected to by the E		• •
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document copies of the priority document copies of the priority document copies of the certified copies of the principles of the principles of the principles of the principles of the certified copies of the principles copies cop	nts have been received. nts have been received in Applic iority documents have been rece	ation No
* See the attached detailed Office action for a list		ived.
Attachment(s)		
1) Notice of References Cited (PTO-892)	4) Interview Summ	ary (PTO-413)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mai	Date
 Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 	8) 5) Notice of Informa 6) Other:	al Patent Application (PTO-152)



United States Patent and Trademark Office

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,905	09/26/2001	Todd A. Hagan	0275D-000435	9433
27572	7590 03/12/2004		EXAM	INER
HARNESS, P.O. BOX 82	DICKEY & PIERCE,	P.L.C.	HARMON, CH	RISTOPHER R
	LD HILLS, MI 48303		ART UNIT	PAPER NUMBER
			3721	· <u></u>

DATE MAILED: 03/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1, 9, 30, and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Schell et al. (US 5,738,177).

Schell et al. disclose a production assembly tool comprising a first structure 34 and a second structure 18, the first structure having a overmold portion 14 and structural portion 12. The overmold portion 14 is made from a resilient material/elastomer (neoprene rubber) and contacts the second structure 42 effectively dampening vibrations and stresses; see figures (1B and 19). Schell et al. disclose bumper member 76 for abuting the second structure 18 and limiting movement. Linking members 86 link the bumper 76 and overmold 14.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-2, 4-15, 29-30, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terada (US 5,692,574).

Application/Control Number: 09/963,905 Page 3

Art Unit: 3721

Terada discloses a portable power tool comprising a motor housing structure 3 and a secondary structure 5; see figure 1B. The housing structure further comprises three molded portions 3a-3c. Overmold portion 30 is molded to fit on an exterior surface of projection 15 extending from housing portion 3c. Overmold portion 30 forms a seal with housing portion 3c and secondary structure 5. Overmold portion 30 is rubber suited to dampen vibrations between the housing structure 3 and secondary structure 5.

Terada does not directly disclose an overmold portion which is permanently and fixedly coupled to the structural portion, however the examiner takes OFFICIAL NOTICE that permanent coupling would have been obvious to one of ordinary skill in the art at the time the invention was made in order to insure a seal between components. Note also that the ring 30 of Terada is irregularly shaped to prevent sliding/misalignment; see figures 2a and 2b.

Regarding claim 2, secondary structure 5 is an end cap consisting of a handle.

Regarding claims 6-8, overmold portion 30 is a bumper member linked by a smaller diameter portion/groove 31 to seal portion/raised lip/isolator portion; see figure 2B.

Regarding claims 13-15, secondary structure 5 has stop member 21 extending therefrom which couples with bumper member 30; see figures 3A and 3B. Overmold portion 30 conforms to the shape of the secondary structure 5 and is raised from the exterior surface (see figure 3B).

Response to Arguments

Art Unit: 3721

5. Applicant's arguments filed 2/3/04 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., overmold portion contacting the transmission) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The overmold portion of Schell further includes a separate linking member and bumper member (screw and O-ring). Applicant seems to be arguing that they are not integral members of the overmold portion yet does not clearly set forth how the claimed invention distinguishes over the separate members. The screw and O-ring members of Schell are necessary to the construction and operation of the invention and are considered elements of the overmold portion.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, <u>THIS ACTION IS MADE FINAL</u>. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Application/Control Number: 09/963,905

Art Unit: 3721

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Page 5

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R Harmon whose telephone number is 703-308-8643. The examiner can normally be reached on Monday-Thursday from 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 703-308-2187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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TOAN			Applic	cation Number	09/9	63,905		
TRANSMITTAL		Filing Date		Sept	September 26, 2001			
APR 2 6 2004 SFORM		First Named Inventor		r T. H	T. Hagan, et al.			
(to be used for all correspondence after initial filing)		Group Art Unit		372	3721			
TADEMAST OF			Examiner Name		Chri	Christopher Harmon		
Total Number of Pages	s in This Submission		Attorne	ey Docket Numb	per 0275	D-000435		
		ENCLO	SURES	(check all that ap	ply)			
Fee Transmittal F	-orm		ment Papers Application)			After Allowance Communication to Group		
Fee Attached		☐ Drawing	g(s)			ppeal Communication to Board of ppeals and Interferences		
Amendment / Res	sponse	Licensi	ng-relate	d Papers		ppeal Communication to Group Appeal Notice, Brief, Reply Brief)		
After Final		Petition	ı			Proprietary Information		
Affidavits/dec	laration(s)		to Conv		□s	tatus Letter		
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Certified Copy of Priority		Remar	The Commissioner is hereby authorized to charge any additional fees that may be required under 37 CFR 1.16 or 1.17 to Deposit Account No. 02-2548. A duplicate copy of this sheet is enclosed.					
Response to Miss				sheet is enclos	eu.			
Response to Missing Parts under 37 CFR 1.52 or 1.53								
	SIGNA	TURE OF A	PPLICA	ANT, ATTORNE	Y OR AGE	NT		
Firm or Harness, Dickey & Pierce, P.L.C			Atto	Attorney Name Michael D. Zalobsky Reg. No. 45,512		Reg. No.		
Signature			3					
Date	April 26, 2004							
				IAILING/TRANS				
I hereby certify that th addressed to: Direct transmitted to the U.S	tor of the U.S. Pate	ent and Trad	lemark C	Office, P.O. Box	Postal Servi 1450, Alexar	ce as express mail in an envelope dria, VA 22313-1450, or facsimile		
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Approved for use through 10/31/2002. OMB 0651-0032
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3 APR 2 6 2004 for FY 2004	Filing Date	September 26, 2001	, 7		
	First Named Inventor	T. Hagan, et al.	3		
Pateri fees are subject to annual revision.	Examiner Name	Christopher Harmon			
Delication claims small entity status. See 37 CFR 1.27	Group / Art Unit	3721	<i>i</i>		
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		3. ADD	DITIONAL	L FEES				
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☐ Deposit Accou	int:	_	Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description Fee	e Paid
Deposit Account	02-2548		1051	130	2051	(*) 65	Surcharge - late filing fee or oath	
Number	02-2546		1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
Deposit		٦	1053	130	1053	130	Non-English specification	
Account	Black & Decker (U.S.) Inc.		1812	2,520	1812	2,520	For filing a request for reexamination	$\neg \neg \neg$
Name The Commission	ner is authorized to: (check all that apply)	ل	1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
	indicated below	ion	1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
	indicated below, except for the filing fee		1251	110	2251	55	Extension for reply within first month	
to the above-ident	tified deposit account. FEE CALCULATION		1252	420	2252	210	Extension for reply within second month	
1. BASIC FIL			1253	950	2253	475	Extension for reply within third month	
Large Entity	Small Entity		1254	1,480	2254	740	Extension for reply within fourth	
	Fee Fee <u>Fee Description</u> Code (\$)		1255	2,010	2255	1,005	Extension for reply within fifth month	— I
· · · /	2001 385 Utility filing fee	3	1401	330	2401	165	Notice of Appeal	
	2002 170 Design filing fee	\dashv	1402	330	2402	165	```	330
	2003 265 Plant filing fee	\dashv	1403	290	2403	145	Request for oral hearing	~
		\dashv				_	Petition to institute a public use	
	2004 385 Reissue filing fee 2005 80 Provisional filling fee		1451 1452	1,510 110	1451 2452	1,510 55	proceeding Petition to revive – unavoidable	
'	(4) (4)		1453	1,330	2452	665	Petition to revive – unavoidable Petition to revive – unintentional	
	SUBTOTAL (1) (\$) 0		1501	1,330	2501	665	Utility issue fee (or reissue)	
2. EXTRA CLAIM	FEES		1502	480	2502	240	Design issue fee	
	Extra Fee from Fee		1502	640	2502	320	Plant issue fee	
Tatal Claims	Claims below Paid	<u></u>	1460	130	1460	130	Petitions to the Commissioner	
Total Claims	-20 ** = 0 X = 0	_	1807	50	1807	50	Processing fee under 37 CFR 1.17 (q)	
Independent Claims	-3 ** = 0 X = 0		1806	180	1806	180	Submission of Information Disclosure	
Multiple Dependent	X = 0		2001		2004	10	Stmt Recording each patent assignment	
Large Entity	Small Entity		8021	40	8021	40	per property (times number of properties)	
Fee Fee Code (\$)	Fee Fee Code (\$) Fee Description		1809	770	2809	385	Filing a submission after final rejection (37 CFR § 1.129(a))	
1202 18 1201 86	2202 9 Claims in excess of 20 2201 43 Independent claims in excess of	3	1810	770	2810	385	For each additional invention to be examined (37 CFR § 1.129(b))	
1203 290	2203 145 Multiple dependent claim, if not		1801	770	2801	385		
1204 86	2204 43 ** Reissue independent claims of original patent		1802	900	1802	900	Request for Continued Examination (RCE) Request for expedited examination	
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SUBMITTED BY				Cor	nplete (if applicable)
Name (Print/Type)	Michael D. Zaloosky	Registration No. Attorney/Agent)	45,512	Telephone	248-641-1600
Signature	MILE	XXX		Date	April 26, 2004